



High temperatures-related elderly mortality varied greatly from year to year: Important information for heat-warning systems

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Abstract:

We examined the variation in association between high temperatures and elderly mortality (age >75 years) from year to year in 83 US cities between 1987 and 2000. We used a Poisson regression model and decomposed the mortality risk for high temperatures into: a "main effect" due to high temperatures using lagged non-linear function, and an "added effect" due to consecutive high temperature days. We pooled yearly effects across both regional and national levels. The high temperature effects (both main and added effects) on elderly mortality varied greatly from year to year. In every city there was at least one year where higher temperatures were associated with lower mortality. Years with relatively high heat-related mortality were often followed by years with relatively low mortality. These year to year changes have important consequences for heat-warning systems and for predictions of heat-related mortality due to climate change.

Source: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3494010>

Resource Description

Early Warning System:

resource focus on systems used to warn populations of high temperatures, extreme weather, or other elements of climate change to prevent harm to health

A focus of content

Exposure :

weather or climate related pathway by which climate change affects health

Temperature

Temperature: Extreme Heat

Geographic Feature:

resource focuses on specific type of geography

Urban

Geographic Location:

Climate Change and Human Health Literature Portal

resource focuses on specific location

United States

Health Impact:

specification of health effect or disease related to climate change exposure

Morbidity/Mortality

Population of Concern: A focus of content

Population of Concern:

populations at particular risk or vulnerability to climate change impacts

Elderly

Resource Type:

format or standard characteristic of resource

Research Article

Timescale:

time period studied

Time Scale Unspecified